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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/596,043	12/21/2006	Hassan Ihs	SC12815ET	1126
23125 7590 10/20/2008 FREESCALE SEMICONDUCTOR, INC. LAW DEPARTMENT 7700 WEST PARKER LANE MD:TX32/PL02 AUSTIN, TX 78729				
EXAMINER				
NGUYEN, HIEP				
ART UNIT		PAPER NUMBER		
2816				
NOTIFICATION DATE		DELIVERY MODE		
10/20/2008		ELECTRONIC		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

USADOCKETING@FREESCALE.COM

Office Action Summary

Application No.

10/596,043

Applicant(s)

IHS, HASSAN

Examiner

HIEP NGUYEN

Art Unit

2816

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 July 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SF/ICE)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

The amendment filed on 07-10-08 has been received and entered in the case. New ground of rejections necessitated by the amendment is set forth below.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-8 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Correction and/or clarification is required.

Claim 1 is confusing because it is read on different embodiments. For instance, the “a continuous-time sigma-delta modulator is seen as element (8) in figure 2; “a delay means”, element 14, in figure 5. Figure 2 and figure 5 are two completely different embodiments. The “a continuous-time sigma-delta modulator”, 8, in figure 2 cannot be a part of the circuit of figure 5 and the “a delay means” cannot be a part of the circuit of figure 2. The “a combiner” is assumed to be element (15) in figure 15. In the specification this element is the logic AND/NAND. This “logic AND/NAND” is not seen in any drawing. Therefore, the functioning of the combiner recited in claim 1 cannot be proven even with the timing diagram of figure 5. Assume that the combiner is circuit (15, OR gate) in figure 9, This OR gate cannot perform the function shown the timing diagram of figure 5.

The recitation “the variability of said widths of said active clock phases being smaller than the variability of the positions of said leading and trailing edges” on lines 15-17 is confusing because figure 5 shows that the active clock phase (ACP) is **larger**, instead of being smaller than “variability of the positions of the leading or trailing edges of the primary clock pulses (CLK). The explanations in the Remarks do not overcome the 112,2nd problem of the last office action. Clear explanation is required.

Regarding claim 2, the recitation “said first series of delay elements” is confusing because it is not clear what it is in the drawing. Assume that this “said first series of delay elements” is element (16) in figure 9 then this recitation lacks antecedent basis.

Claim 3 is confusing because it is not understood what it is meant by. Assume that claim 3 reads on figure 9. Assume that “a further series of cascade delay elements” are circuit (22); “said delay elements of said first series” are element (14) then the recitation “said delay elements of said first series” lacks antecedent basis. It is not clear as to whether the “said further series of delay elements” on line 5 is the same or different than the “a further series of cascade delay elements” on lines 2-3. The recitation “said further series train of delayed clock pulse series” on line 6-7 lacks antecedent basis. The recitation “said train of primary clock pulses” on line 7 lacks antecedent basis. The recitation “said train of primary clock pulses for applying an adjustment signal to tend to correct the delay of said further train of delayed clock pulses” on lines 7-9 is confusing. Figure 9 shows that the “said train of primary clock pulses” (CLK) does not apply an adjustment signal (?) to tend to correct the delay of said further train of delayed clock pulses”, the output signal of circuit (27). The “said train of primary clock pulses” (CLK) is delayed by circuit (27, 16). The recitation “said train of primary clock pulses” lacks antecedent basis. The recitation “said first series of delay elements” on line 12 lacks antecedent basis. For clarification, the Applicant is requested to show the “a further series of cascaded delay elements” on line 2-3, “said delay elements of said first series” on line 3-4, “said further series of delay elements” on line 5, “said further series train of delayed clock pulses” on lines 6-7, “said train of primary clock pulses” on lines 7-8 and “said first series of delay elements” on line 12 in the drawing(s).

Regarding claim 5, Claims 5 and 6 depends upon claim 1. Claim 1 is indefinite and it is not clear what the circuit of claim 1 reads on. The Applicant is requested to point out what is the circuit of claims 1, 5 and 6. Regarding claim 5, the recitation “wherein said continuous-time sigma-delta modulator comprises an integrator for integrating a signal over periods of time defined by said widths of said active clock phases” is confusing because assume that claims 5 reads on figure 1. The integrator (2) does not integrate a signal over periods of time defined by said widths of said active clock phases (ACP) as recited.

Regarding claim 6, the recitation “wherein said continuous-time sigma-delta modulator comprises a digital-to-analogue converter module whose operation is responsive to said train of combined clock pulses” is confusing because the “digital-to-analog converter

module (5) in figure 1 does not operate in responsive to said train of combined clock pulses. The recitation “said train of combined clock pulses” lacks antecedent basis.

Regarding claims 7 and 8, it appears that this claim reads on figure 1 of the present application. However, figure 1 does not comprise the clock pulse generator and delay module s (figure 9) as recited in claim 1. Therefore, it is not clear what drawing the circuit of claims 7 and 8 read on. The recitation “said train of combined clock pulses” in claim 7 lacks antecedent basis.

Response to Arguments

Applicant's arguments filed on 07-10-08 have been fully considered but they are not persuasive. In the Remarks the Applicant argues that claim 1 reads on figures 1, 2, 5 and 7. It appears that figures 1, 2 and 5 are completely different embodiments. Therefore, drawing(s) for the set of claims 1-8 are not clearly defined.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action. Any inquiry concerning this communication or earlier communications from the examiner should be directed to HIEP NGUYEN whose telephone number is (571)272-1752. The examiner can normally be reached on Monday to Friday from 7:30am to 4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Donovan D. Lincoln can be reached on (571) 272-1988. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Tuan T. Lam/

Primary Examiner, Art Unit 2816

/Hiep Nguyen/

Examiner, Art Unit 2816

10-14-08